

COPY**ABSTRACT**

This invention relates to a modulator for use in gas chromatographic analysis, adapted for alternatively trapping and releasing fractions of solutes in a length of a capillary column within a chromatographic oven, characterized in that it comprises at least one nozzle placed to spray at least one jet in at least one corresponding place along said capillary column length, said nozzle(s) being connected each to a source of liquid CO₂ via a related valve, and means for alternatively opening said valve(s) for a predetermined time, to cause a jet of liquid CO₂ to impinge for said predetermined time on said column place and to leave the oven atmosphere to heat said column place after said predetermined time. The modulator can be used in a conventional GC system or in a two dimensional GC system, for modulating the analytes fed to the second capillary column.